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COVER: COLORADO SPRUCE *(Picea pungens)* growing in the Aboretum. Photo September 1960.

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Missouri Botanical Garden Bulletin

Vol. XLVIII No. 10 December 1960

The Board of Trustees

and the Garden Staff

join me in

extending the

Season's

Greeting

and our sincere

thanks to the

many friends

of the Garden

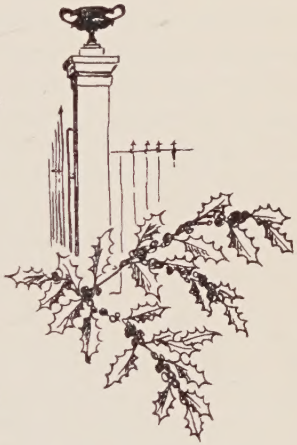
for their loyal

support during the

first year of our

Second Century

Fritz Weber



FLOWER SUNDAY AT CHRIST CHURCH CATHEDRAL INITIATED BY THE LEGACY OF MR. SHAW

"I hereby devise and bequeath two hundred dollars annually to the Bishop of the Episcopal Church of this diocese, in consideration (if he approve of the same) that an annual sermon be preached in such church, and by such minister as he may select; on the wisdom and goodness of God as shown in the growth of flowers, fruits and other products of the vegetable Kingdom; to be paid annually out of the funds of the said Botanical Garden". So reads the will of Mr. Shaw (Fourth Clause, paragraph 26). The first Sunday following Easter has been set aside annually and designated "Flower Sunday at Christ Church Cathedral" St. Louis. Each year since Mr. Shaw's time the speakers have used this flower theme. The church is also elaborately decorated with flowers from the Missouri Botanical (Shaw's) Garden.

This past year (April 24, 1960) the sermon "God in Nature and in Christ" was delivered by the Very Reverend Dr. John B. Coburn, Dean of the Episcopal Theological School at Cambridge, Massachusetts. Dr. Coburn's message, like that of so many of his predecessors, has so admirably carried out the intent of Mr. Shaw that we are reprinting this latest one for the pleasure of the Friends of the Garden. Although the sermon was delivered originally at the Easter Season, it is of a timeless character and is, we think, quite as appropriate at this Christmas Season.

GOD IN NATURE AND IN CHRIST

John B. Coburn

May I say, first of all, what a privilege it is for me to share in the traditional Flower Sunday service in this Cathedral. Perhaps you will permit, by way of introduction, three personal words of appreciation.

First, for generations the ministry of this Cathedral Church to this city and state and its witness to the essential unity of Christ's Church through its relationship with other Christian communions have made it one of the great churches in our land. I am privileged at last to see that Cathedral of which I have heard so much.

Secondly, either through personal friendship or as a member of the family of the Episcopal Theological School I am honoured to stand in a pulpit occupied by such friends and alumni as Bishop Scarlett, Bishop Lichtenberger, Bishop Cadigan, Dean Sweet and Dean Cole. The School is happy to be known and judged by such graduates as these.

Finally, I am pleased to speak upon such an occasion as this when a conscious relationship between God and nature is recognized. This is a theme which currently is in disfavor theologically; it is one in which I believe heartily; and I am grateful for this opportunity to affirm it as part of the Gospel of Christ.

. . . .

Have you ever had the experience

out in the country during the summer of sitting down alone under a tree when all is quiet? Then the stillness is broken by the sound of fluttering. You look up and watch the leaves brushing against each other and the branches swaying. You wonder where the breeze has come from. Then the sound stops, and you wonder where it has gone.

Or have you ever had the experience, when you were under that tree, of sitting down and leaning against its trunk? Have you ever closed your eyes and shut out the external world so that you might press back against the trunk and imagine yourself merging into it, and you say to yourself: "I wonder what it's like to be a tree— rooted . . . grounded . . . sturdy . . . stretching?"

Have you ever been out in a field on the side of a hill at dusk? Did you ever stretch out on the ground and bury your face in the grass and smell the earth; then when you raised your head you felt the warm breeze come down off the hillside, and you put a blade of brass in your mouth and chewed on it; and as you looked out over the valley and twilight fell, there seemed to be a sudden hush in the world, almost as though the earth stood still for a moment? You were caught up in the world of nature that in turn seemed to be caught up in something beyond itself; almost as though in its recognition of that something more it seemed to bow down before it? And when later you walked down the hill spitting out the chewed-up bits of grass you were thoughtful, reflective, a little bit different, as though you had been invited into another world and brushed against another spirit?

Most of us sometime in our lives— and some people many times— have experiences such as these. Young people in particular have them with intensity. They are part of the common human heritage where, usually through the world of nature, we are put in touch with mystery. We suddenly become aware of, or at least suspect, a world beyond our physical world, a spirit that impinges upon our existence, a mysterious realm around us that compels our attention.

You may remember that scene in *The Wind in the Willows* where something like this happened to those good animal friends, Rat and Mole. Let me remind you for a moment of their adventure.

At one point in the book the baby otter is lost. Mole and Rat set out in their boat into the river to try to find him. They go upstream, searching the river bank. Darkness falls. The moon comes out and lends her light. They patiently continue their search, going steadily further upstream; the moon sinks finally into the earth; darkness and mystery descend. Then in the pre-dawn hush a change begins to take place.

> The horizon became clearer, field and tree came more into sight, and somehow with a different look; the mystery began to drop away from them. A bird piped suddenly, and was still; and a light breeze sprang up and set the reeds and bulrushes rustling. Rat, who was in the stern of the boat, while Mole sculled, sat up suddenly and listened with a passionate intentness. Mole, who with gentle strokes was just keeping the boat moving while he scanned the banks with care, looked at him with curiosity.

He hears something. Then he loses it. Then it comes again.

"O, Mole!" he says, "the beauty of it! The merry bubble and joy, the thin, clear happy call of the distant piping! Such music I never dreamed of, and the call in it is stronger even than the music is sweet! Row on, Mole, row! For the music and the call must be for us."

So in silence Mole rows steadily on. Then he too hears the distant piping; it breaks upon him, catches him up and possesses him utterly. It brings both pain and joy. The sound draws nearer. The boat comes to rest on the shore of an island.

"This is the place of my song — dream, the place the music played to me," whispered the Rat, as if in a trance. "Here, in this holy place, here if anywhere, surely we shall find Him!"

Then suddenly the Mole felt a great Awe fall upon him, an awe that turned his muscles to water, bowed his head, and rooted his feet to the ground. It was no panic terror — indeed he felt wonderfully at peace and happy — but it was an awe that smote and held him and without seeing, he knew it could only mean that some august Presence was very, very near. With difficulty he turned to look for his friend, and saw him at his side cowed, stricken, and trembling violently. And still there was utter silence in the populous bird-haunted branches around them; and still the light grew and grew.

Perhaps he would never have dared to raise his eyes, but that, though the piping was now hushed, the call and the summons seemed still dominant and imperious. He might not refuse, were Death himself waiting to strike him instantly, once he had looked with mortal eye on things rightly kept hidden. Trembling he obeyed, and raised his humble head; and then, in that utter clearness of the imminent dawn, while Nature, flushed with fullness of incredible colours, seemed to hold her breath for the event, he looked in the very eyes of the Friend and Helper; saw the backward sweep of the curved horns, gleaming in the growing daylight; saw the the stern, hooked nose between the kindly eyes that were looking down on them humorously, while the bearded mouth broke into a half-smile at the corners; saw the rippling muscles on the arm that lay across the broad chest, the long supple hand still holding the pan-pipes only just fallen away from the parted lips; saw the splendid curves of the shaggy limbs disposed in majestic ease on the sward; saw, last of all, nestling between his very hooves, sleeping soundly in entire peace and contentment, the little, round, podgy, childish form of the baby otter. All this he saw, for one moment breathless and intense, vivid on the morning sky; and still, as he looked, he lived; and still, and he lived, he wondered.

"Rat!" he found breath to whisper, shaking. "Are you afraid?"

"Afraid?" murmured the Rat, his eyes shining with unutterable love. "Afraid of Him! O, never, never! And yet — and and yet — O, Mole, I am afraid!"

Then the two animals, crouching to the earth, bowed their heads and did worship. Sudden and magnificent, the sun's broad golden disc showed itself over the horizon facing them; and the first rays, shooting across the level water-meadows, took the animals full in the eyes and dazzled them. When they were able to look once more, the Vision had vanished, and the air was full of the carol of birds that hailed the dawn.

You see and hear the fluttering leaves; you press back in the trunk of a tree; you watch twilight fall in the valley. And should you be asked, "Friend, are you afraid?", you might answer with Rat, "Afraid, afraid of *Him!* O, never, never! And yet — and yet—O, Mole, I *am* afraid." And then you might with them both bow your head and worship.

These experiences, these little "breakings in" as from another world are what Elizabeth Vining (in her book, *The World in Tune*) calls "minor ecstacies." They are part of the common currency of human experience. Indeed at certain stages of our lives they may provide the most real world where we live on the deepest level of our existence. They

may provide on the one hand nothing more than a momentary lift of the spirit as a shaft of light from the sun filters into the shade of a wooded grove or as a wave crashes and thunders on a sandy beach. Or, at the other extreme they may provide the entrance into another world of beauty and mystery whose spirit gradually possesses one's own spirit and transforms it. This is the world where the artist and the poet dwell whose eyes see, and tongues tell and hands reveal a world no less real because most mortals do not dwell there.

For our purposes, however, these experiences take on special significance because they may mark the religious awakening of the human spirit. Indeed they may be — alas! — the sum total of the religious experience of many. But that danger should not deter us from seizing boldly the opportunities offered by them to be led into the presence of God.

The theme of this sermon then is just this: The response of the human spirit in such experiences as these is the response of man to God. God may act openly or hiddenly in and through these experiences in nature. It is a theme which I trust is not contrary to the spirit of those who founded "Flower Sunday" in this Cathedral Church.

This theme can be presented poetically. Indeed William Blake has done so in this verse:

I give you the end of a golden string
Only wind it into a ball,
It will lead you in at heaven's gate,
Built in Jerusalem's wall.

The "golden string" is let down by God — the first religious awareness in the world of nature. Take it as such — as coming from God — respond to it, wind it; it will lead you in at heaven's gate, built in Jerusalem's wall.

The world of innocent nature, then — let that word "innocent" be stressed, for fallen nature wrecks havoc and destruction and bears the power of evil — provides "signs of this presence" of God himself extending golden strings into the lives of men and women and children, that they may wind them into a ball to lead them into Jerusalem's wall. This world where God breaks through is a place, says Lord Tweedsmuir in *Pilgrim's Way* of inexhaustible beauty but still more it is "the husk of something infinite, ineffable and immortal, in very truth the garment of God."

Let us take one further step in our thinking. If this world then is "in very truth the garment of God" it must be of the God who was in Christ reconciling the world unto Himself. Nature cannot reflect some other God — a pantheistic God unconcerned about distinctions between right and wrong, a God of nature who absorbs his creatures in a nature-mysticism, a God less than the one who died for us on the Cross — for the God of nature is the Father of our Lord Jesus Christ, one God. So let me in these final words simply point in one direction where you may be helped to see—no, experience—golden strings as sacramental experiences of the presence of Christ who took upon himself our flesh and lived in our world. Let me point briefly to three

guideposts that mark the direction.

Before Christ died on a Cross, he was born in a stable; before his death expressed God's mind, his birth showed God's love. "God so loved the world that he gave his only begotten Son . ." The Incarnation is given.

So all golden strings are given. We cannot call them forth; we do not deserve them. All we can do is receive them. They are "incarnational" in character — the "givenness" of the wind, leaves fluttering, the earth standing still, the song of a lark. This is the first guide-post: the "givenness" of the Incarnation.

And the second is: mystery, awe, transcendence, holiness. On that first silent night the angels appear out of nowhere before the shepherds watching their flock and sing "Glory to God in the highest." And the shepherds were frightened with a holy awe. And the other Nativity story is, of course, the wise men from the East bringing gifts — gold, and frankincense and myrrh — and bowing down before Him offering Him homage.

So every golden string bears mystery. Each one comes out of a mysterious "other" world—nobody knows how it comes or why or where it goes. It comes as a flash of lightening in the dark, or a cry in the stillness, or a whisper as a falling leaf — touched with mystery, transcendent, awesome.

And the third guide post is this: Christ was born that we might be born anew. He came to change us: to adopt us as sons. Augustine put it this way: the Son of God became the son of man in order that the sons of men might become the sons of God. What a difference the Incarnation makes!

And so in some small measure, on an infinitely less scale in our little personal lives the golden strings make us different. They inspire us, frighten us, make us more solemn or less solemn perhaps, give us a touch of happiness, put us in touch with the scource of happiness, give us something of that inner joy which "the world can neither give nor take away." They may even at their best — and our best — make us more holy.

Whatever our own golden strings may be — the wind blowing, leaves fluttering, a lark singing, the sun rising, the waves pounding — they are of nature and of more than nature. They are "the husk of something infinite, ineffable, and immortal, in very truth the garment of God."

And if we wind the end of our golden strings they will lead us in at heaven's gate, built in Jerusalem's wall — the dwelling place of the most high God, even our Lord Jesus Christ to whom be glory for ever and ever. Amen.

SIGNIFICANCE OF THE PRIVATELY-OPERATED BOTANICAL GARDEN

R. J. Seibert

A botanical garden should first of all be attractive, interesting and beneficial to those who support it. It must be operated from private endowments and subscriptions, or from public funds which are either directly appropriated or are grants for support of research and educational institutions. "A garden operated entirely from public funds is frequently subject to the whims of those not necessarily concerned with its over-all operation or the philosophy and purpose for which the garden was estabilshed. Its operation is further frustrated by the ups and downs of fiscal fluctuations resulting in feast or famine budgets which often cause corresponding spurts of over-enthusiastic pursuits of new features, followed by periods of doldrums. The financing, whether public or private, needs responsible leadership with control measures to provide a realistic and continuous smooth-flowing operation which does not become static on the one hand, or over-ambitious on the other."

A number of botanic gardens in this country have, to a great extent, gained financial stabilization by joining forces with their city, county or other governmental agency in arranging for:— 1, public funds to support and maintain those portions of the over-all program which are seen by and concerned directly with the public; 2, utilization of their private sources of funds and endowment income for scientific research. This method is used by such well-known gardens as the New York Botanical Garden, the Brooklyn Botanical Garden, the Los Angeles State and County Arboretum, and the Fairchild Tropical Garden near Miami, to name a few.

The privately-operated botanical garden, it is realized, must be basically financed — someone must give it funds — someone must assure that these funds are ever-present, and someone must be sure the garden operates within the available amount. The government encourages you to support this type of non-profit research and educational work by allowing contributions to be deductible from your income tax. It is through this method that significant advances in human welfare can and will continue to make their mark free from governmental interference.

The Missouri Botanical Garden established by Mr. Shaw, and since its inception through Mr. Shaw's foresight, has gained and maintained world-wide prominence in the field of botany. It is privately operated with the income from Mr. Shaw's endowment, public contributions and from research grants by governmental agencies. The garden has never been static. It has made every effort within its means to keep within the demands of the times. One need only to remind you of its prominent place as a leader in the fields of Physiology, Mycology. Taxonomy, Genetics, Floristics—all fields of fundamental research. Its library and

herbarium are research tools comparable to the best in the country. Its Garden and Arboretum have been the envy of other institutions and the pride of St. Louis. Its improvements in such important plant families as orchids and water lilies have made this garden famous all over the world.

This first week in October you have seen the dedication of a modern climate-controlled greenhouse, one means of advancing with the times in plant science. If man is to exist on earth or in space anywhere under a continuously-exploding population, he must devote a full measure of manpower, time, money and modern facilities on imaginative research, using plants available at present here on this earth. You already know this costs money. You also know the Missouri Botanical Garden has contributed magnificently to these researches. It is now embarking on a new and far greater contribution to mankind—of course with your support.

There are a number of these interesting and privately-operated botanical gardens in this country. Prominent among them are the Longwood Gardens established by a farsighted industrialist, Mr. Pierre S. Dupont, in Chester County, Pennsylvania. The prime purpose of this Garden is to

Entrance to Longwood Gardens
Formal Planting of Annuals in the Foreground

Flower Garden and Fountain in Longwood Gardens

provide a Horticultural Display for the enjoyment of the public, but behind the scenes much work and research goes on to make the exhibits beneficial and educational. This Garden, like Shaw's Garden, cooperates with other agencies such as the U.S. Plant Introduction Service, the U.S. Forest Service, Bailey Hortorium, Morris Arboretum, Pennsylvania State University, and the University of Delaware, in promoting plant research in its many phases.

The talk was beautifully illustrated with numerous color slides of flowers and scenes in the Longwood Gardens, two of which are reproduced here.

Summarized from address of Dr. R. J. Seibert, Director of Longwood Gardens, for the Climatron Opening, October 3, 1960.

GARDEN GATE FESTIVAL

The Women's Association of the Garden is making plans for the second Garden Gate Festival to be held next May (date to be announced later) on the parking lot of the Famous-Barr Company in Clayton, Missouri. The proceeds will benefit the the Missouri Botanical (Shaw's) Garden. Cuttings and other starts of many kinds of plants are being made and readied for the Spring event.

Due to the unusual interest in the Herb Society booth at last year's Festival an early start in this line is being made to assure adequate supplies of fresh and dried herbs, herb mixtures and other items for the herb fancier.

MISSOURI BOTANICAL GARDEN PROGRAMS

Poinsettia display December 11 through January 8.

Orchid Show January 29 through February.

Free Nature Programs for children, age seven and over, are held every Saturday morning from 10:00–11:30 A.M. in the Museum Building.

Program for December and January:

Insectiverous Plants ..... December 3
Make Your Own Christmas Decorations 10
Make Your Own Christmas Decorations 17
Color Sound Movies 31
Dead or Alive ..... January 7
Winter Puzzles 14
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SOME FACTS ABOUT SHAW'S GARDEN

The Missouri Botanical (Shaw's) Garden was established in 1859 by Henry Shaw, a St. Louis businessman, to be controlled by a Board of Trustees for the public benefit. The Garden is a non-profit institution which receives no support from the city or state, depending on the income from the Shaw estate supplemented by contributions from the public.

The old stone walls and cast-iron fences, the Linnean House, the Museum Building, the part of the Administration Building which was Shaw's Town House, relocated in the Garden in 1890, and the Tower Grove House, his country home, all date from Mr. Shaw's time. The Main Gate, display and growing greenhouses and most other facilities date from the period immediately following the turn of the century. The Climatron, opened in 1960, is the first of several new buildings planned for the Garden's redevelopment. It is the world's first geodesic dome, fully climate-controlled greenhouse and contains the Garden's tropical collections.

The Garden — 70 acres — is open every day of the year (except Christmas and New Year) from 9 A.M. until sundown, and the greenhouses close at 5 P.M. Tower Grove House is open daily from 10 A.M. to 4 P.M. (December to March on weekends only). The Display House presents four seasonal displays:— November, Chrysanthemums; December, Poinsettias; February, Orchids; Spring, Lilies and other flowers. During the year are other shows, competitions and festivals sponsored by various Garden Clubs and Flower Societies.

Courses in Botany and Horticulture for adults are conducted by the Garden staff. Children's nature studies are provided each Saturday of the year and a special nature program is held during the summer. Information on these activities is published in the BULLETIN or may be had by mail or phone. The Garden maintains a research program through the Henry Shaw School of Botany, Washington University.

In 1926 an Arboretum — 1600 acres — was established at Gray Summit, Missouri. Foot trails and roads pass through the Arboretum and are open to visitors in April and May.

The Garden Administration Building is located at 2315 Tower Grove Ave., and the Garden main entrance is at Tower Grove and Flora Place. The entrance at Tower Grove and Cleveland Avenue is also open to the public. The Garden is served by both the Sarah (No. 42) and the Park-Southampton (No. 80) city bus lines.

Persons interested in helping to support the Garden and taking part in Garden activities are urged to do so through the "Friends of the Garden". Information may be obtained from the Main Gate or by mail or phone.